

**REMARKS**

Claim 1 has been amended to incorporate the recitations of claim 12, and claims 5 and 12 have been canceled accordingly.

Entry of the above amendment is respectfully requested.

**Obviousness Rejection over Wong in view of Atsumi and Pratt**

Claims 1, 3, 6-11, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wong et al. (U.S. Patent No. 6,306,371), in view of Atsumi et al. (U.S. Patent No. 5,266,534) and Pratt et al. (U.S. Patent No. 4,849,223).

In response, Applicant notes that claim 1 has been amended to incorporate the recitations of claim 12, which has not been included in this rejection. Accordingly, Applicant submits that this rejection has been overcome, and withdrawal of this rejection is respectfully requested.

**Obviousness Rejection over Wong in view of Atsumi, Niira, and Ghosh**

Claims 1, 5, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wong et al. (U.S. Patent No. 6,306,371), in view of Atsumi et al. (U.S. Patent No. 5,266,534), Niira, deceased et al. (U.S. Patent No. 4,938,955), and Ghosh et al. (U.S. Patent Application Pub. No. 2005/0227895).

Applicant respectfully submits that the present invention is not obvious over the cited art combination, and requests that the Examiner reconsider and withdraw this rejection in view of the following remarks.

Wong et al. (US 6,306,371)

Amended Claim 1 of the present invention is directed to a silver-based inorganic antibacterial agent dispersion comprising (1) a silver ion-containing phosphate salt series compound as a silver-based inorganic antibacterial agent and (2) a discoloration inhibitor, wherein the discoloration inhibitor is a combination of an imidazole series compound and a benzotriazole series compound (Claim 1).

On the other hand, Wong et al. is directed to a method of stabilizing an oral composition containing silver zeolite as an antiplaque agent (Claim 1 of Wong). Wong et al. discloses only silver zeolite as an antibacterial agent and never discloses nor suggests a silver ion-containing phosphate salt series compound. Namely, Wong et al. is completely silent about a silver ion-containing phosphate salt series compound, which is an essential element of Claim 1 of the present invention.

Further, the present invention comprises as a discoloration inhibitor a combination of an imidazole series compound and a benzotriazole series compound (Claim 1).

Wong et al. recites a color stabilizing amount of a salt selected from the group consisting of chloride, acetate and citrate salts (Claim 1 of Wong). Wong et al. is completely silent about an imidazole series compound, a benzotriazole series compound, and a combination thereof, which is an essential element of Claim 1 of the present invention as a discoloration inhibitor,

Therefore, Wong et al. never discloses nor suggests the present invention.

Atsumi et al (US 5,266,534)

Atsumi et al. is completely silent about an imidazole series compound, a benzotriazole series compound, and the combination thereof, which is an essential element of Claim 1 of the present invention as a discoloration inhibitor.

Therefore, Atsumi et al. never discloses nor suggests the present invention.

Niira, deceased et al. (US 4,938,955)

Niira, deceased et al. discloses an antibiotic resin composition comprising an antibiotic zeolite, the ion-exchangeable ions of which are partially or completely replaced with ammonium ions and antibiotic metal ions comprising silver ions. Niira, deceased et al. only discloses an antibiotic zeolite with silver ions and never discloses nor suggests a silver ion-containing phosphate salt series compound as recited in Claim 1 of the present invention.

Niira, deceased et al. discloses a benzotriazole series compound as a discoloration inhibitor but does not disclose an imidazole series compound nor a combination thereof, which is an essential element of Claim 1 of the present invention as a discoloration inhibitor.

Therefore, Niira, deceased et al. never discloses nor suggests the present invention.

Ghosh et al. (US Patent Application Publication 200510227895)

Ghosh et al. is directed to an antimicrobial composition comprising a metal complexed with a polymer wherein the metal is selected from copper, silver, gold, tin, zinc and combinations thereof; and wherein the polymer comprises monomer residues selected from residue A, residue B, residue C and mixtures thereof

Ghosh et al. describes a silver complex with imidazole containing polymer as a silver-based organic antibacterial agent. On the other hand, the present invention is directed to a silver-based inorganic antibacterial agent consisting of a silver ion containing phosphate salt series compound.

The present invention comprises an imidazole series compound as a discoloration inhibitor. It is clear from the description (see page 7, lines 18-19 in the present application) that the imidazole series compound is a low-molecular compound as exemplified as "imidazole,

benzimidazole, and 2-methylimidazole" and free. By "free", it is meant that the imidazole series compound is not complexed with a metal.

In conclusion, Ghosh et al. does not disclose the free imidazole series compound as a discoloration inhibitor. Ghosh et al does not disclose the benzotriazole series compound nor the combination of the imidazole series compound and the benzotriazole series compound, which is an essential element of Claim 1 of the present invention as a discoloration inhibitor.

Wong et al. in view of Atsumi et al., Niira, deceased et al. and Ghosh et al.

Applicant submits that an ordinary artisan would not have been motivated to arrive at the present invention from Wong et al. in view of Atsumi et al., Niira, deceased et al. and Ghosh et al. In this regard, Applicant submits that Ghosh et al. does not disclose the imidazole series compound as a discoloration inhibitor.

Advantageous effects of the present invention

Applicant notes the results shown in Table 3. Example 3 (a combination of imidazole and methylbenzotriazole) shows unexpectedly superior advantageous effects over Example 1 (imidazole only) or Example 2 (methylbenzotriazole only).

Thus, Applicant submits that the present invention is not obvious over Wong et al. in view of Atsumi et al., Niira, deceased et al. and Ghosh et al., and withdrawal of this rejection is respectfully requested.

**Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the

Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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Respectfully submitted,



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